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Figure 1

GalMKRD	HHHHHQD	KK	KT	MMNNEED	DDGN	GM	DELLA	V	LG	YKVRSS	EMAD	VAQKLE	Q	LE	V	54						
0803	EAGGSS	GGGS	SADMG	SC	KK	DK	V	MAGAX	GEE	E	x	V	DELLA	A	LG	YKVRSS	DMAD	VAQKLE	Q	LE	M	60		
Gal	M	MSNVQ	EDDL	S	Q	L	A	T	E	T	V	H	Y	N	P	A	E	L	Y	T	W	L	D	
0803	A	MG	GGV	T	P	P	A	Q	R	M	T	G	S	C	R	T	W	P	R	T	K	F	I	...

CCCCGACGGTTCGCGGCCGCGGCCAACGCGACGCCCGCGCTGCCGGTCTGCTGTGG
TCGACACGCAGGAGGCCGGGATTTCGGCTGGTGCACGCGCTGCTGGCGTGCGCGG
AGGCCGTGCAGCAGGAGAACCTCTCCGCCGCGGAGGCGCTGGTGAAGCAGATAC
CCTTGCTGGCCGCGTCCCAGGGCGGCGCGATGCGCAAGGTCGCCGCCTACTTCGG
CGAGGCCCTCGCCCGCCGCGTCTTCCGCTTCCGCCCGCAGCCGGACAGCTCCCTC
CTCGACGCCGCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGCCCCTA
CCTCAAGTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCGTTCGCCGGC
TGCCGCCGCGTGACGTCGTCGACTTCGGCATCAAGCAGGGGATGCAGTGCCCC
GCACTTCTCCAGGCCCTCGCCCTCCGTCCCGGCGGCCCTCCCTCGTTCCGCCTCAC
CGGCGTCGGCCCCCGCAGCCGGACGAGACCGACGCCCTGCAGCAGGTGGGCTG
GAAGCTCGCCAGTTTCGCGCACACCATCCGCGTCGACTTCCAGTACCGCGGCC
TCGTGCGCCGCCACGCTCGCGGACCTGGAGCCGTTTCATGCTGCAGCCGGAGGGCG
AGGAGGACCCGAACGAAGANCCCGANGTAATCGCCGTCAACTCAGTCTTCGAGA
TGCACCGGCTGCTCGCGCAGCCCGGCGCCCTGGAAAAGGTTCTTGGGCACCGTGC
GCCCCCGTGCGGCCCAGAAATTCNTCACCGTGGTGGAAACAGGAGGCCAAATCACA
ACTCCGGCACATTCTTGACCGCTTCACCGAGTCTCTGCACTACTACTCCACCAT
GTTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGGCGGCCCATCCGAAGTCTCATCG
GGGGCTGCTGCTGCTCCTGCCGCCGCCGGCACGGACCAGGTTCATNTCCGAGGTGT
ACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGGGGGGCGGAACGCACAG
ANCGCCACGAGACGCTGGGCCAGTGGCGGAACCGGCTGGGCAACGCCGGGTTCG
AGACCGTCCACCTGGGCTCCAATGCCTACAAGCAGGCGANACGCTGCTGGCGC
TCTTCGCCGGCGGGCGAACGGCTACANGTGGAAGAAAAGGAAGGCTGCCTGACGC
TGGGGTTGCACACNCCCCCTGATTGCCACCTCGGCATGGCGCCTGGCCGGGGCCG
TGATCTCGCGAGTTTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACA
CAGCCCCGGCGGCCCGCCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGA
AGAAGAAGAAGCTAAATGTTCATGTTCAGTGAGCGCTGAATTGCAGCGACCGGCTA
CGATCGATCGGGCTACGGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGA
CGACGAACTCCGAGCCGACCACCGGCATGTAGTAATGTAATCCCTTCTTCGT
TCCCAGTTCTCCACCGCCTCCATGATCACCCGTAAAACTCCTAAGCCCTATTATTA
CTACTATTATGTTTAAATGTCTATTATTGCTATGTGTAATTCTCCAACCGCTCAT
ATCAAAAATAAGCACGGGCCGGAAAAA
AAAAA
AAAAA

Figure 2b(1)

CGCGCAATGCTTAAGGTCNCCGCCTACTTCGGNGCAGGCCCTCGCCCCGCCGCGTC
TTCCGCTTCCGCCCCGAGCCGGACAGCTCCCTCCTCGACGCCGCTTCGCCGACCT
CCTCCACGCGCACTTCTACNAGTCCTGCCCCCTACCTCAAGTTCGCGCACTTCACCG
CCAATTAGGCCATCCTGGAGGCGTTCGCCGGCTGCCGCCGCGTGCACGTCGTCGA
CTTCGGCATCAAGCAGGGGATGCAGTGGCCCCGCACTTCTCCAGGCCCTCGCCCTC
CGTCCCGGCGGCCCTCCCTCGTTCCGCCTCACCGGCGTCGGCCCCCGCAGCCGG

Figure 2b(2)

ACCTCCTTCGTCGTCTNTNNGGTGGGGGCGCCAGGAGCTTATGTGGTGGAGGNTG
GCCCCNCCGGTCGCGACCGCGNCCTACGNGACGCCCGCGCTGCCGGTCGTCTGTGG
TCGACACGCAGGAGGCCGGGATTCCGGNTGGTNCACGCGCTGCTGGNGTGCGNNGG
AGNCCGTGCAGCAGGAGAACCTCTCCGCCGCGGAGGCGCTNGTGAAGNAGATAC
CCNTGCTGGCCGAGTCCCAGGGCGGCGAGATGNGCAAGGTNGCAGCTTACTTNG
NAGANGCCCTCGCCCGCNGAGTGATTCCACTTANCGCCTGCAGCCGGANAGCTCC
GTCCTCGAANCCGCNTTNGCCGACCTCCTCCACGNGCACNTNTACGAGTC

Figure 2b(3)

TANTAGTCTCTCGGTGGGGGCGCCAGGAGCTCTNTGGTGGAGGCNCCCCGCCG
GTCGCGGCCGCGGCCAACGCGACGCCCGCGCTGCCGGTCGTCTGTGGTCGACACG
CAGGAGGCCGGGATTCCGGATGGTGCACGCGCTGNTGGCGTGCGCGGAGGCCGTG
AAACAGTTGAAGGNCCNCGCCTNNNNNCNCACAANNTGAAAGCCCCGNG

Figure 2b(4)

GGCTNCCNCCNCGTGCACGTCGTCTGACTTCGGCATCAAGCATGGGATGCANTGGC
NCGNACTTCTCCANGCCCTCGCCCTCCGTCCCGGCGGCCCTCCCTCGTTCCGCCTC
ACCGGCGTCGGCCCCCGCAGCCGGACGAGACCGACGCCCTGCANCAGGTGGGC
TGGAAGCTCGCCCAGTTCGCGCACACCATCCGCGTCGACTTCCANTACCGTGGCC
TCGTCTGCCGCCACGCTCGCGGACCTGGAGCCGTTTCATGCTGCANCCGGAGGGCGA
GGAGGACCCGAACGACGGAGCCCGAGGTAATCGCCGTCAACTCAGTCTTCGAGA
TGCACCGGGCTGCTCNCGCANCCCGGCGACNCTGGAANAA

Figure 2b Continued

Figure 2b(5)

CAAGANGCTAATCACAACCTCCGGCACATTCTGGACCGCTTCACCGAGTCTCTGC
ANTACTACTCCACCATGTTTCGATTCCCTCGAGGGGCGGCAGCTCCGGCGGGCGGCC
ATCCGAAGTCTCATCGGGGGCTGCTGCTGCTCCTGCCGCCGCCGGGCACGGACCAT
GTCATGTCCGAXGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGG
GGGCGGAGCGCACANTANCGCCACGCAGACNCTGGGCCAGTGGCGTGAACCGGC
TGGGCAACGCCNGGTTCCANNNNCCGTCCACCTGGGCTCCAATGCCTACAATCAN
GCNNNCACGCTGCTGGCGCCTCTTCGCCC

Figure 2b(6)

TCGCCANTCGGCATGGNGCCTGGCCGGGGCCGTGATCTCGCGAGTTTTGAACGCTG
TAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCGGCCGCCCGGCT
CTCCGGCGAACGCACGCACGCACGCACTTGGAAGAAGANAAGCTAAATGTCAT
GTCAGTGAGCGCTGAATTGCAACGACCGGCTACGATCGATCGGGCTACGGGTGG
TTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCCGANCCGACCAC
CACCGGCATGTAGTAATGTAATCCCTTCTTCGTTCCAGTTCTCCACCGCCTCCAT
GGATCACCCGTAAAACCTCCTAAGCCCTAATTATNNACTAACTAATTATGTTTTAA
AATGTTCTAATTAATTGGCTATGTTGTAATNCCTCCAAACCGGCTCATTTTCAA
NATTAAGCCACGGGCCCCGGAACTTTGGTTTAACAACCTCCCNATTGNAAAATTNA
AATNGAAATTTTTGGTTNC

Figure 2b(7)

GTTGGTGGNGGCGATTTGGGTACAAGGTGCGCGCCTCCGACATGGNGGANGTGG
GGCAGAAGCTGGAGCAGNTCGAGATGGCCATGGGGATGGGNGGCGTGGGCGCT
GGCGCCGCCCTGACGACAGGTTNGCCACCCGCNGGCCGCGGACACNGTGCANT
ACAACCCACACNGACNTGTCGTCTTGGGTGAGAGCATGCTGTGCGAGCTAAANG
AGCCGCNGCCGCCCTCCCGCCCCGCGAGCTCAACGCCTCCACCTCCTCCAC
CGTCACGGGCAGCGGCGGCTACTTCGATAACCCTCCCTG

Figure 2b(8)

TGATGGNNGGAGNTTANGGGTTANAAATGTGGGGGANTTCCGAANNNGTGAGG
ANATATNNTCAGAAAGTTGGAGCAGATGAGAGATNGCTGATGGGGATAGGGTAGG
NGTGGGTGCCGGTGCGCCCCCNAGGANAGATTGGCCACCCACTTAGCAAGTGG
ANACCGTGGATTACNACCCACACAGACCTGTCGTGGTTGGGTTTGAGAGCGTGGTG
TGGGAGCTGAACGGGCGNGCGGCGTGCCCTCCCGCCCCGCCCGCAGCTCAACGCC
TCCACCTCCTCCACCGTACACGGGCAGCGGCGGCTAGTTCGATCTCCCGCCCTCC
GTCGACTCCTCCAGCAGCATNTANGCGCTGCGGCCGATCCCCTNCCCAAGCNNGC
GNNGNCCGAGCCGTGTAN

Figure 2b Continued

Figure 2b(9)

TTTCANTTTCNTCCTTTTTTCTTCTTTTTCCAACCCCCGGCCCCCNGACCCTTGGAT
CCAAATCCCGAACCCGCCCCAGAACCNNGAACCGAGGCCAAGCAAAAGNTTTG
CGCCAATTATTGGCCAGAGATAGATAGAGAGGCGAGGTAGCTCGCGGATCATGA
AGCGGGAGTACCAGGACGCCGGAGGGAGCGGCGGCGGCGGTGGCGGCATGGGT
TCGTCCGAGGACAAGATGATGGTGTCTGGCGGCGGCGGGGGAGGGGGAGGAGGT
GGACGAGCTGCTGGCGGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGA
CGTGGCGCAGAAGCTGGAGCAGCTCGAGATGGCCATGGGGATGGGCGGCGTGGG
CGCCGGCGCCGCCCCCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGTG
CAGTACAACCNCCNGACC

Figure 2b(10)

GGACGACGACCTCCGAGCCGACCACCACCGGCATGTAGTAATGTAATCCCTTCTT
CNTTCCAGTNCTCCACCGCCTCCATGATACCCGTAAACTCCTAAGCCCTATT
ATTACTACTATTATGTNTAANTGTCTATTATTGCTANGTGTAATTCCTCCAACCGC
TCATATCAAAATAAGCACGGGCCGGACTTTGTTANCAGCTCCAATGAGAATGAA
ATGAATTTTGTACGCAAGGCACGTCCAAACTGGGCTGAGCTTTGTTCTGTTCTG
TTATGTTTCATGGTGCTCACTGCTCTGATGAACATGATGGTGCCTCCAATGGTGGC
TTTGCAATTGTTGAAACGTTTGGCTTGGGGGACTTGNGTGGGTGGGTGCATGGGG
ATGAATATTACATCNCCGGATTAAATTAAGCCATCCCGTTGGCCGTCTTTGA
ATANCTTGCCCNAAACGAAATTTCCCCCNATC

Figure 2b(11)

AAANCCTANAANATATAGAGGCGATGTNGCNCCCCNATCANNAACNNGGATTACN
GNAACNCCNGAAGGAGCGGCGGCGGCGGTGGCAGCATNGGCTCGTCCGATGACA
AATATCATGGTGTCTGGCGGCGGCGGGGGACGGGGAGGAGGTGCACAACNTTTNG
GCGGGACTCGNGTACCACGTGNACGGTGCCGCNCTNGNGGATNTGGCCCTNGAA
GATGGGCCACCTCCAAA

Figure 2b Continued

Figure 2b(12)

CGGCGGCCCCGTGGCGGCATGGGCTCGTCCGAGGACNAGATGATGGTGTTCGGCG
GCGGCGGGGGANGGGGATGATGTGGACTATCTGCTGGCGGCGCTCGGGTACAAG
GTGCGCGCCTCCGACAGGCGGAGCCCGCGCATAACTGGAGCCGCTCGAGATGGC
CNTGGGGATNGGCGGCNTGGGCNCCNGCGCCTCCCCCG

Figure 2b(13)

TGGNGCTCGGGTGNCCCGTGCGCGCCTCCGACATGGCGGGACGTGGCGCAGAAC
TGGAGCAGCTCGAGATGGCCATGGGGATGGGCGGCGTGGGCGCCGGCGCCGCCC
CCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGGCACACAACCCACCG
ACCTGTCGTCTTGGGTCGAGAGCATGCTGTCGGATCTCNACGCGCCNCCGNCGCC
CCTCCCGCCCCG

Figure 2c(1)

ANNTTGTNCNNNTACATCCCATGNGCCGCGCNATGCTNAAGGTCGCCGCCTACT
TCGGCGCAGGCCCTCGCCCGCCGCGTCTTCCGCTTCCGCCCGCAGCCGGACAGCT
CCCTCCTCGACGCCGCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGC
CCCTACCTCAAGTTCGCGCACTTCACCGCCAACCAGGCCATCCTGGAGGCGTTTCG
CCGGCTGCCGCCGCGTGCACGTCGTCGACTTCGGCATCAAGCAGGGGATGCAGT
GGCCCGCACTTCTCCAGGCCCTCGCCCTCCGTCCCGGCGGCCCTCCCTCGTTCCGC
CTCACCGGCGTTTCGGCCCCCGCAGCCGGACGANAACGACGCCCTG

Figure 2c(2)

NTTCCCCGGCAGTTAAAAGCNTCCACTTCTTCCACCGTCACGGGCAGCGGCGGNT
ACTTNGATCTCCCGCCCTCAGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCC
GATCCCCCTCCCCGGCCGGCGCGACGGCGCCGGCCGACCTGTCCGCCGACTCCGTG
CGGGATCCCAAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTCATCCTCCT
CATANTCGTCTCTCGGTGGGGGCGCCAGGAGCTCTGTGGTGGAGGCNCCCCGCC
GGTCGCGGCCGCGGCCAACGCGACGCCCGCGCTGCCGGTCGTCGTGGTTCGACAC
GCAGGAGGCCGGGATTTCGGATGGTGCACGCGCTGNTGGCGTGCGCGGAGGCCGT
GNAAGCAGTTNGAAGGGCCTNCGCCGTGNATNNCGCAACAANNNGGAAGNCCN

Figure 2c(3)

CANCCCGCTGNTCGCCACCTCGGCATGGCGCCTGGCCGGGGCCGTGATCTCGCGAG
TTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCG
GCCGCCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGAAGAAGAAGAAG
CTAAATGTCATGTCAGTGAGCGCTGAATTGCANCGACCGGCTACGATCGATCGG
GCTACGGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCC
GANCCGACCACCACCGGCATGTAGTAATGTAATCCCTTCTTCGTTCCCAGTTTCTC
CACCGCCTCCATGATCACCCCGTAAACTCCTAAGCCCTATNNNTTACTACNATT
AATGTTTTAAANTGTTCTANTAATTGCTATGNTGTTTATTNCC

Figure 2c(4)

TATCGAAGTAGCCGCCGCTGCCCNTGCACGGTGGAGGAGGTGGAGGCGTTGAGC
TGCGGGGGCGGGCGGGAGGGGCGGCGGCGGCACGTTNAGCTCCGACAGCATGCTC
TCGACCCAAAACNACAGGTCCGGTGGGGTTGTAGTGCACGGTGTCCGTGGCGAGG
GGGTGGCNAANCTGTCGTCAGGGGCGGCGCCNCGCCCAACNCCGCCCATCCCCA
TGGCCATCTCGANCTGCTCCAGCTTCTGCGCCACTTCNCCATGTCNGATGCGCG
CNCCTTGTACCCGA

Figure 2c Continued

Figure 2c(5)

ACGGCGCGGNCCNCGCNNGCTTGGGAGGGGATCGGCCGCAGCGCNTANATGCTG
CTGGAGGAGTCGACGGAGGGCGGGAGATCGAACTAGCCGCCGCTGCCCCGTGTAC
GGTGGAGGAGGTGGAGGCGTTGAGCTGCGGGGCGGGCGGGAGGGGCGAGCNGCT
GCACGTTNAGCTCCACACACGCTCTCTCAACCCAACCACGACNCGTCTGTGGGG
TNGTAATNCACGGTNTCCCTNGCTANGTGGGTGGCCAATCTNT

Figure 2c(6)

CACGGTGTCCGTGGCGAGGTGGGTGGCGAAGCTGTCGTCGGGGGCGGGCGCCGGC
GCCCACGCCGCCATCCCCATGGCCATCTCGAGCTGCTCCAGCTTCTGCGCCACG
TCCGCCATGTCGGAGGCGCGCACCTTGTACCCGAGCGCCGCCAGCAGCNCGNCC
ACCTCCTCCCCCTCCCCCGCCGCCGCCGACACCATCATCTTGTCTCGGACGANCC
CATGCCGCCACCGCCGCCGCCGCTCCCTCCGGCGTCTTGGTACTCCCGCTTCATG
ATCCGCGAGCTACCTCGCCTCTCTATCTATCTCTGGCCAATAATTGCGCA

Figure 2c(7)

GACCACCACCGGCATGTAGTAATGTAATCCCTTCTTCNTTCCCAGTTCTCCACCGC
CTCCATGATACCCGTAAACTCCTAAGCCCTATTATTACTACTATTATGTNTAA
ATGTCTATTATTGCTANGTGTAATTCCTCCAACCGCTCATATCAAAATAAGCACG
GGCCGGACTTTGTTAGCAGCTCCAATGAGAATGAAATGAATTTTGTACGCAAGGC
ACGTCCAAACTGGGCTGAGCTTTGTTCTGTTCTGTTATGTTTCATGGTGCTCACTG
CTCTGATGAACATGATGGTGCCTCCAATGGGTGGCTTTGCAATTGTTGAACGTTT
TGGCTTGGGGGACTTGGTGNNTGGTGCATGGGAATGAANATTCCACATCCNCNG
GAATTAAAATTAGCCCATCCCG

Figure 3a

TTTCANTTTCNTCCTTTTTTCTTCTTTTTTCCAACCCCCGGCCCCCNAGACCCTTGGATCC
AAATCCCGAACCCGCCCCCAGAACCNGGAACCGAGGCCAAGCAAAAGNTTTGCGCC
AATTATTGGCCAGAGATAGATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGG
AGTACCAGGACGCCGGAGGGAGCGGCGGCGGCGGTGGCGGCATGGGTTCGTCCGAG
GACAAGATGATGGTGTCTGGCGGCGGCGGGGGAGGGGGAGGAGGTGGACGAGCTGC
TGGCGGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAG
CTGGAGCAGCTCGAGATGGCCATGGGGATGGGCGGCGTGGGCGCTGGCGCCGCCCC
TGACGACAGGTTNGCCACCCGCGNGGCCGCGGACACNGTGCANTACAACCCACNGA
CNTGTCTCTTGGGTTCGAGAGCATGTCTGTCGGAGCTAAANGAGCCGCGNGCCGCCCC
TCCCGCCCCGCCCCGAGCTCAACGCCTCCACCGTCACGGGCAGCGGCGGNTACTTNG
ATCTCCCGCCCTCAGTCGACTCCTCCAGCAGCATCTACGCGCTGCGGCCGATCCCT
CCCCGGCCGGCGCGACGGCGCCGGCCGACCTGTCCGCGGACTCCGTGCGGGATCCC
AAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTCATCCTCCTCATANTCGTCT
CTCGGTGGGGGCGCCAGGAGCTCTGTGGTGGAGGCGNGCCCCGCCGGTTCGCGGCCGC
GGCCAACGCGACGCCCGCGCTGCCGGTCTGTCGTGGTTCGACACGCAGGAGGCCGGGA
TTCGGCTGGTGCACGCGCTGCTGGCGTGCGCGGAGGCCGTGCAGCAGGAGA.ACCTC
TCCGCCGCGGAGGCGCTGGTGAAGCAGATAACCTTGCTGGCCGCGTCCCAGGGCGG
CGCGATGCGCAAGGTCTGCCGCCTACTTCGCGGAGGCCCTCGCCCCGCCGCTCTTCG
CTTCCGCCCGCAGCCGGACAGCTCCCTCCTCGACGCGCCTTCGCCGACCTCCTCCA
CGCGCACTTCTACGAGTCCTGCCCTACCTCAAGTTCGCGCACTTCACCGCCAACCA
GGCCATCCTGGAGGCGTTCGCCGGCTGCCGCCGCGTGCACGTCGTTCGACTTCGGCAT
CAAGCAGGGGATGCAGTGGCCCGCACTTCTCCAGGCCCTCGCCCTCCGTCCCCGGCGG
CCCTCCCTCGTTCCGCCTCACCGGCGTTCGGCCCCCGCAGCCGGACGAGACCGACGC
CCTGCAGCAGGTGGGCTGGAAGCTCGCCAGTTCGCGCACACCATCCGCGTTCGACTT
CCAGTACCGCGGCCTCGTCGCCGCCACGCTCGCGGACCTGGAGCCGTTTCATGCTGCA
GCCGGAGGGCGAGGAGGACCCGAACGAAGANCCCGANGTAATCGCCGTCAACTCA
GTCTTCGAGATGCACCGGCTGCTCGCGCAGCCCGGCGCCCTGGAAAAGGTTCTTGGG
CACCGTGCGCCCCCGTGCGGCCCGAGAATTCNTCACCGTGGTGGAAACAGGAGGCAA
ATCACAACTCCGGCACATTCCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCA
CCATGTTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGCGGGCCATCCGAAGTCTCAT
CGGGGGCTGCTGCTGCTCCTGCCGCCGCCGGCACGGACAGGTTCATNTCCGAGGTGT
ACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTGCGAGGGGGGCGGAACGCACAGAN
CGCCACGAGACGCTGGGCCAGTGGCGGAACCGGCTGGGCAACGCCGGGTTTCGAGAC
CGTCCACCTGGGCTCCAATGCCTACAAGCAGGCGANACGCTGCTGGCGCTCTTCGC
CGGCGGCGAACGGCTACANGTGGAAGAAAAGGAAGGCTGCCTGACGCTGGGGTTGC
ACACNCCCCCTGATTGCCACCTCGGCATGGCGCCTGGCCGGGCGGTGATCTCGCGA
GTTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCGG
CCGCCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGAAGAAGAAGAAGCTA
AATGTCATGTCAGTGAGCGCTGAATTGCAGCGACCGGCTACGATCGATCGGGCTAC
GGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCCGAGCCGA
CCACCACCGGCATGTAGTAATGTAATCCCTTCTTCGTTCCAGTTCTCCACCGCCTCC
ATGATCACCCGTAAAACTCCTAAGCCCTATTACTACTATTATGTTTAAATGTCTA
TTATTGCTATGTGTAATTCCTCCAACCGCTCATATCAAAATAAGCACGGGCGGACT
TTGTTANCAGCTCCAATGAGAATGAAATGAATTTTGTACGCAAGGCACGTCCAAAA
CTGGGCTGAGCTTTGTTCTGTTCTGTTATGTTTCATGGTGCTCACTGCTCTGATGAACA
TGATGGTGCCTCCAATGGTGGCTTTGCAATTGTTGAAACGTTTGGCTTGGGGGACTT
NGTGGGTGGGTGCATGGGGATGAATATTCACATCNCCGGATTAAAAATTAAGCCAT
CCCGTTGGCCGTCTTTGAATANCTTGCCCNAAACGAAATTTCCCCCNATC

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Figure 3b

PRETTYBOX of: My.Msf(*) August 7, 1997 13:06:42.76

GaiM	KRDH HHHHQ.D	KRTMMMN EED	DGN GMD ELLA	VLGYKVRSSE	41
Rht	IERRGSSRI	KREYQDAGGS	GGGGGGMGSE	DMMVSAAG	EGEEVDELLA	ALGYKVRASD	60
Gai	MADV AQKLEQ	LEVMM S.....	...NVQEDD	LSQLA TE TVH	YNPAEL YTM L	DSMLTD LNPP	93
Rht	MADV AQKLEQ	LEMAMGMGGV	GAGAAPDRQV	XHPXAADTVX	YNPTDXSSWV	EBMLSELXEP	120
Gai	.....	.....	.....	SNAEYDLKAI	PGDAI LNQFA	IDSA SSSNQ.	123
Rht	XPPLPPAPQL	NASTVTGSGG	YXDLPPSVDS	SSSIYALRP	PSPAGATAPA	DLBADSVRDP	180
Gai	.....	.....	.....	.....	.....	.....	169
Rht	GGGGDT	YTTNKRLKCS	NG.....	TTTAT	AESTRHVVLV	DSQENGVRRLV	240
Gai	.....	.....	.....	.....	.....	.....	227
Rht	HALLACAEAV	QKENLTVABA	LVKQIGF LAV	SQIGAMRRKVA	TYFAEALARR	IYR LSPSQ.	300
Gai	.....	.....	.....	.....	.....	.....	287
Rht	SPI D HSLSDT	LQMHFEYETCP	YLRPAHEFTAN	QALIEAFQCK	KRVHV IDESM	SQGLQWPPALM	360
Gai	.....	.....	.....	.....	.....	.....	347
Rht	QALALRPGGP	PVPRLTGIGP	PAPDNFDY LH	EVGCKLAHLA	EAIHVFEF YR	GFVANNTLADL	420
Gai	.....	.....	.....	.....	.....	.....	400
Rht	DASNLELRPS	EIES.....	V	AVNSVFELHK	LLGRPGAIDK	PEIFFTVVE.Q	480
Gai	.....	.....	.....	.....	.....	.....	442
Rht	ESNHNSPIPL	DRPTESLHY	STLFDSLEGG	PSGQ.....	SGAAAPAAA	DKVMSEVY	540
Gai	.....	.....	.....	.....	.....	.....	502
Rht	LGRQICNVVA	CQGPDRVERH	ETLSQWRNRF	GNAGEETVHL	GSNAFKQASM	LLALFNGGEG	600
Gai	532
Rht	YRVEESDGCL	MLGWHTRP LI	ATSAWKLS TN	ATSAWRLAGP	630		

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Figure 4a

ACGCGTCCGGAAGCCGGCGGGAGCAGCGGCGGCGGGAGCAGCGCCGATATGGG
GTCGTGCAAGGACAAGGTGATGGCGGGGGCGGCGGGGGAGGAGGAGGACGTCT
ACGAGCTGCTGGCGGCGCTCGGGTACAAGGTGCGGTCTCCGACATGGCCGACG
TCGCGCAGAANCTGGAGCAGCTGGAGATGGCCATGGGGATGGGCGGCGTGAGCG
CCCCCGGCGCCGCGGATGACGGGTTCGTGTGCGCACCTGGCCACGGACACCGTGC
ACTACAACCCCTCGGACCTCTCCTCCTGGGTTCNGAGAGCATGCTTTCGGAGTTA
AAGGCGCCGTTGCCCCCTTATCCCGCCAGGCGCCGCGGGCTGCCCGCCATGCTTT
CCAACTTCGTCCACTGTCAACGGCGGCGGTGGTAGCGGCTTCTTTGAANTCCCAG
CCGCTGCCGANTCGTCGAGTAGCACNTACGCCCTCAGGCCGATCTCCTTACCGGT
GGTGGCGACGGCTGACCCGTCGGCTGCTGACTCGGCGAGGGACACCAAGCGGAT
GCGCACTGGCGGCGGCAGCACGTCGTCGTCCTCATCGTCGTCTTCCTCTCTGGGC
GGTGGGGCCTCGCGGGGCTCTGTGGTGGAGGCTGCTCCGCCGGCGACGCAAGGG
GCCGCGGCGGCGAATGCGCCCCGCCGTGCCGTTGTGGTGGTTGACACGCAGGAG
GCTGGNATCGGGCCTGGTGC

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Figure 4b

Wheat Rice Gai	I E R G S S R I M T R P E A G G S S G K R D H H H H H Q D	K R E Y Q D A G G S T R P E A G G S S G K R D H H H H H Q D	G G G G G G G G S E G G S S A D M G S C G G G G G G G G S E	D K M M M S A A A G R D K M M A G A A G K K T V M M N E E E E	E G E E V D E L L A E E E D V D E L L A E G G M G M D E L L A	A L G Y K K V R A S D A L G Y K K V R S S D V L G Y K K V R S S E	60 50 41
Wheat Rice Gai	M A D V A O K L E O M A D V A O X L E O M A D V A O K L E O	L E M A N G M G G V L E M A N G M G G V L E M M M S	G A G A A P D R Q V S A P G A A D D G F N V Q I E D D	X H P X A A D T V X V S H L A T D T V H L B Q L A T E T V H	Y N P T D X S S W V Y N P S D L S S W V Y N P A L E Y T M N T	E S M L S E L X E P E S M L S E L K A P E S M L T D L N P P	120 110 93
Wheat Rice Gai	X P P L P P . A P Q L P L I P P G A G L P L I P P G A G	L N A S L P A M L S P T S B L P A M L S P T S B	T V T G S G . . G Y T V T G G G S Q F T V T G G G S Q F	X D L P P S V D B S F E X P A A A X B S N A E V D E L W A I P	S S I Y A L R P I P S S T Y A L R P I S N A E V D E L W A I P	S P A G A T A P A D L P V V A T A D P S G D A I L N . . . Q	171 170 112
Wheat Rice Gai	L S A D S V R D P K A A D S A R D T K F A I D B A	R N R T G G S S T B R N R T G G S S T B R N R T G G S S T B	S B S B S X S B L G S B S B S S S B L G S B S B Q G G G G	G G A . R S B V V E G G A S R G S V V E D T Y T T N K R M K	A A P P V . . A A A A A P P A T Q G A A C S N G V V E T T T	A N A T P A L P V V A A N A P A V P V V A T A E S T R H V V	228 229 157
Wheat Rice Gai	V V D T Q . . E A G V V D T Q E E A G T V D S Q . . E N G	I R L V H A L L A C I R L V H A L L A C M R L V H A L L A C	A E A V Q Q E N L S X E A V Q Q E N L E A E A V Q K E N L T	A A E A L V K Q I P V A E A L V K Q I G V A E A L V K Q I G	L L A A B Q G G A M F L A V B Q I G A M F L A V B Q I G A M	R K V A A Y E G E A R K V A T T Y E A E A R K V A T T Y E A E A	286 258 215
Wheat Rice Gai	L A R R V F R F R P L A R R I Y R L S E L A R R I Y R L S E	Q P D S B L L D A A S Q . . B P I D H S S Q . . B P I D H S	F A D L L H A H P Y L S D T L Q M H P Y L S D T L Q M H P Y	E S C P Y L K F A H E T C P Y L K F A H E T C P Y L K F A H	P T A N Q A I L E A P T A N Q A I L E A P T A N Q A I L E A	E A G C R R V H V V E Q G K K R V H V I E Q G K K R V H V I	346 258 273
Wheat Rice Gai	D E G I K Q G M Q W D E S M S Q G L Q W D E S M S Q G L Q W	P A L L O A L A L R P A L M Q A L A L R P A L M Q A L A L R	P G G P P S F R L T P G G P P V F R L T P G G P P V F R L T	G V G P P Q P D E T G I G P P A P D N F G I G P P A P D N F	D A L Q Q V G W K L D Y L H E V G C K L D Y L H E V G C K L	A Q F A H T I R V D A H L A E A I H V E A H L A E A I H V E	406 258 333
Wheat Rice Gai	F O Y R G L V A A T F E Y R G F V A N T F E Y R G F V A N T	L A D L E P F M L Q L A D L D A S M L E L A D L D A S M L E	P E G E E D P N E X L R P S E I E S . . L R P S E I E S . .	P X V I A V N S V E V A V N S V E V A V N S V E	E M H R L L A Q P G E L H K L L G R P G E L H K L L G R P G	A L E K V L G H R A A I D K V L G . V V A I D K V L G . V V	466 258 387
Wheat Rice Gai	P P C G P E F X T V N Q I K P E I F T V N Q I K P E I F T V	V E T Q E A N H N S V E . Q E S N H N S V E . Q E S N H N S	G T F L D R P T E S P I F L D R P T E S P I F L D R P T E S	L H Y Y S T M P D S L H Y Y S T L P D S L H Y Y S T L P D S	L E Q G S B G G G P L E Q V P B G Q . . L E Q V P B G Q . .	S E V S S G A A A A S E V S S G A A A A S E V S S G A A A A	526 258 434
Wheat Rice Gai	P A A G T D Q V X D K V M D K V M	S E V Y L G R Q I C S E V Y L G K Q I C S E V Y L G K Q I C	N V V A C E G A E R N V V A C D G P D R N V V A C D G P D R	T X R H E T L G Q W V E R H E T L S Q W V E R H E T L S Q W	R N R L Q N A G F E R N R F G S A G E A R N R F G S A G E A	T V H L Q S N A Y K A A H I G S N A F K A A H I G S N A F K	586 258 488
Wheat Rice Gai	O A X T L L A L F A O A S M L L A L E N O A S M L L A L E N	G G E R L X V E E K G G E G Y R V E E S G G E G Y R V E E S	E G C L T L G L H T D G C L M L G W H T D G C L M L G W H T	X P L I A T S A M R R P L I A T S A M K R P L I A T S A M K	L A G P 630 L A G P 258 L A G P 532	L A G P 630 L A G P 258 L A G P 532	

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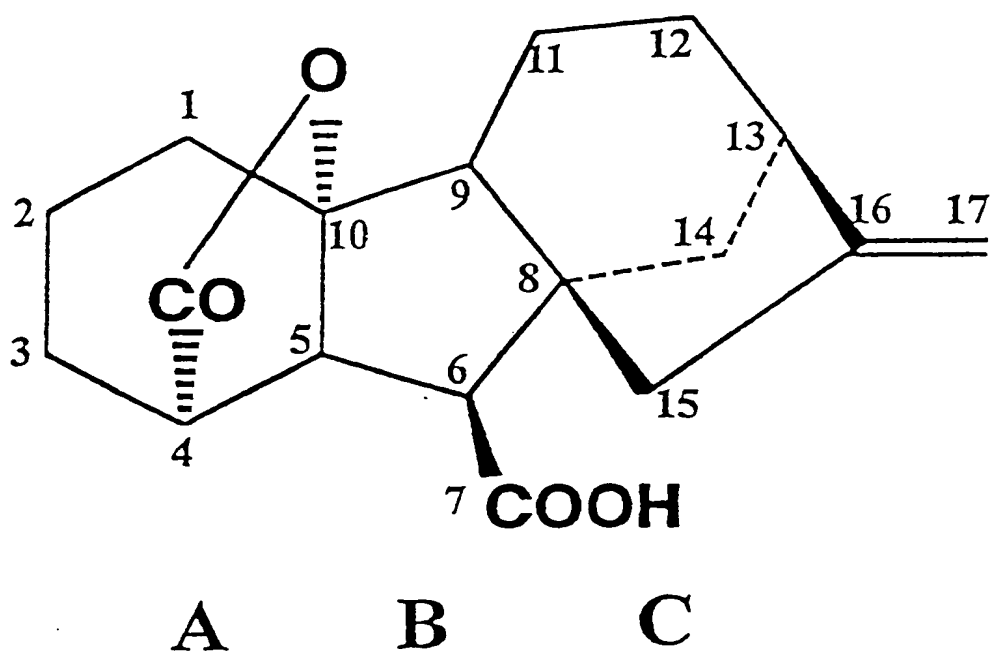
Figure 5

Figure 6a

GTCGACCCACGCGTCCGGAAGCCGGCGGGAGCAGCGGCGGGCGGGAGCAGCGCC
GATATGGGGTTCGTGCAAGGACAAGGTGATGGCGGGGGCGGCGGGGGAGGAGGA
GGACGTCGACGAGCTGCTGGCGGCGCTCGGGTACAAGGTGCGGTCTGTCGACAT
GGCCGACGTCGCGCAGAAGCTGGAGCAGCTGGAGATGGCCATGGGGATGGGCGG
CGTGAGCGCCCCCGGCGCCGCGGATGACGGGTTCGTGTGCGCACCTGGCCACGGA
CACCGTGCACTACAACCCCTCGGACCTCTCCTCCTGGGTTCGAGAGCATGCTTTCC
GAGCTCAACGCGCCGCTGCCCCCTATCCCGCCAGCGCCGCGGCTGCCCCGCCATG
CTTCCACCTCGTCCACTGTACCGGCGGCGGTGGTAGCGGCTTCTTTGAACTCCC
AGCCGCTGCCGACTCGTCGAGTAGCACCTACGCCCTCAGGCCGATCTCCTTACCG
GTGGTGGCGACGGCTGACCCGTCGGCTGCTGACTCGGCGAGGGACACCAAGCGG
ATGCGCACTGGCGGCGGCGAGCACGTCGTCGTCCTCATCGTCGTCTTCTCTCTGG
GCGGTGGGGCCTCGCGGGGCTCTGTGGTGGAGGCTGCTCCGCCGCGGACGCAAG
GGGCCGCGGCGGCGAATGCGCCCCGCGTGCCGGTTGTGGTGGTTGACACGCAGG
AGGCTGGGATCCGGCTGGTGCACGCGTTGCTGGCGTGCGCGGAGGCCGTGCAGC
AGGAGAACTTC

Figure 6b

RPTRPEAGSSGGSSADMGSCKDKVMAGAAGEEDVDELLAALGYKVRSSDMAD
VAQKLEQLEMAMGMGGVSAPGAADDGFVSHLATDTVHYNPSDLSSWVESMLSELN
APLPPIPPAPPAARHASTSSTVTGGGGSGFFELPAAADSSSSTYALRPISLPVVATADPS
AADSARDTKRMRTGGGSTSSSSSSSSSLGGGASRGSVVEAAPPATQGAAAANAPAVP
VVVVDVTQEAGIRLVHALLACAEAVQQENF

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Figure 7a

GCCAGGAGCTCTGTGGTGGAGGCTGCCCCGCCGGTCGCGGCCGCGGCCAACGCG
ACGCCCCGCGCTGCCGGTCGTCTGTGGTCGACACGCAGGAGGCCGGGATTTCGGCTG
GTGCACGCGCTGCTGGCGTGCGCGGAGGCCGTGCAGCAGGAGAACCTCTCCGCC
GCGGAGGCGCTGGTGAAGCAGATACCCTTGCTGGCCGCGTCCCAGGGCGGGCGCG
ATGCGCAAGGTGCGCCGCTACTTCGGCGAGGCCCTCGCCCCGCCGCTCTTCCGCT
TCCGCCCCGACGCCGGACAGCTCCCTCCTCGACGCCGCTTCGCCGACCTCCTCCA
CGCGCACTTCTACGAGTCCTGCCCTACCTCAAGTTCGCGCACTTCACCGCCAAC
CAGGCCATCCTGGAGGCGTTCGCCGGCTGCCGCCGCGTGCACGTCTGACTTCG
GCATCAAGCAGGGGATGCAGTGGCCCGCACTTCTCCAGGCCCTCGCCCTCCGTCC
CGGCGGCCCTCCCTCGTTCGCGCTCACCGGCGTTCGGCCCCCGCAGCCGGACGAG
ACCGACGCCCTGCAGCAGGTGGGCTGGAAGCTCGCCAGTTCGCGCACACCATC
CGCGTCGACTTCCAGTACCGCGGCCCTCGTCGCCGCCACGCTCGCGGACCTGGAGC
CGTTCATGCTGCAGCCGGAGGGGCGAGGAGGACCCGAACGAGGAGCCCGAGGTAA
TCGCCGTCAACTCAGTCTTCGAGATGCACCGGCTGCTCGCGCAGCCCGGCGCCCT
GGAGAAGGTCCTGGGACCGTGCAGCGCCGTGCGGCCCAGGATCGTCACCGTGGT
GGAGCAGGAGGCGAATCACAACCTCCGGCACATTCCTGGACCGCTTCACCGAGTC
TCTGCACTACTACTCCACCATGTTTCGATTCCCTCGAGGGCGGCAGCTCCGGCGGC
GGCCCATCCGAAGTCTCATCGGGGGCTGCTGCTGCTCCTGCCGCCCGCCGGCACGG
ACCGAGTTCATGTCCGAGGTGTACCTCGGCCGGCAGATCTGCAACGTGGTGGCCTG
CGAGGGGGGCGGAGCGCACAGAGCGCCACGAGACGCTGGGCCAGTGGCGGAACC
GGCTGGGCAACGCCGGGTTTCGAGACCGTCCACCTGGGCTCCAATGCCTACAAGC
AGGCGAGCACGCTGCTGGCGCTCTTCGCCGGCGGCGACGGCTACAAGGTGGAGG
AGAAGGAAGGCTGCCTGACGCTGGGGTGGCACACGCGCCCGCTGATCGCCACCT
CGGCATGGCGCCTGGCCGGGGCCGTGATCTCGCGAGTTTTGAACGCTGTAAGTACA
CATCGTGAGCATGGAGGACAACACAGCCCCGGCGGCCCGCCCGGCTCTCCGGCG
AACGCACGCACGCACGCACTTGAAGAAGAAGAAGCTAAATGTCATGTCAAGTGA
CGCTGAATTGCAGCGACCGGCTACGATCGATCGGGCTACGGGTGGTTCGCTCCGT
CTGGCGTGAAGAGGTGGATGGACGACGAACTCCGAGCCGACCACCACCGGCATG
TAGTAATGTAATCCCTTCTTCGTTCCAGTTCTCCACCGCCTCCATGATCAQCCGT
AAAACCTCCTAAGCCCTATTACTACTATTATGTTTAAATGTCTATTATTGCTAT
GTGTAATTCCTCCAACCGCTCATATCAAAATAAGCACGGGCCGGAAAAA
AAA
AAA

Figure 7b

ARSSVVEAAPPVAAAANATPALPVVVVDVTQEAGIRLVHALLACAEAVQQENLSAAE
ALVKQIPLLAASQGGAMRKVAA YFGEALARRVFRFPQPDSSLLDAFADLLHAHF
YESCPYLKFAHFTANQAILEAFAGCRRVHVVDVFGIKQGMQWPALLQALALRPGGPPS
FRLTGVGPPQPDETDALQQVGWKLQFAHTIRVDFQYRGLVAATLADLEPFMLQPE
GEEDPNEEPEVIAVNSVFEMHRLLAQPGALEKVLGTVRAVRPRIVTVVEQEANHNSG
TFLDRFTESLHYYSTMFDSLEGGSSGGGPSEVSSGAAAAPAAAGTDQVMSEVYLGR
QICNVVACEGAERTERHETLGQWRNRLGNAGFETVHLGSNAYKQASTLLALFAGGD
GYKVEEKEGCLTLGWHTRPLIATSAWRLAGP

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Figure 8a

ATAGAGAGGCGAGGTAGCTCGCGGATCATGAAGCGGGAGTACCAGGACGCCGG
AGGGAGCGGCGGCGGGTGGCGGCATGGGCTCGTCCGAGGACAAGATGATGGT
GTCGGCGGCGGCGGGGAGGGGGAGGAGGTGGACGAGCTGCTGGCGGCGCTCG
GGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAGCTGGAGCAGC
TCGAGATGGCCATGGGGATGGGCGGCGTGGGCGCCGGCGCCGCCCCGACGACA
GCTTCGCCACCCACCTCGCCACGGACACCGTGCACATAACCCACCCGACCTGTC
GTCTTGGGTGCGAGAGCATGCTGTGCGAGCTCAACGCGCCGCGCCGCCCCCTCCCG
CCCGCCCCGCGAGCTCAACGCCTCCACCTCCTCCACCGTCACGGGCAGCGGCGGCT
ACTTCGATCTCCCGCCCTCCGTGCACTCCTCCAGCAGCATCTACGCGCTGCGGCC
GATCCCCCTCCCCGGCCGGCGCGACGGCGCCGGCCGACCTGTCCGCCGACTCCGTG
CGGGATCCCAAGCGGATGCGCACTGGCGGGAGCAGCACCTCGTCGTCATCCTCCT
CCTCGTCGTCTCTCGGTGGGGGCGCCAGGAGCTCTGTGGTGGAGGCTGCCCCGCC
GGTCGCGGCCGCGGCCAACGCGACGCCCGCGCTGCCGGTCGTCTGTGGTTCGACAC
GCAGGAGGCCGGGATTTCGGCTGGTGCACGCGCTGCTGGCGTGCGCGGAGGCCGT
GCAGCAGGAGAACCTCTCCGCCGCGGAGGCGCTGGTGAAGCAGATACCCTTGCT
GGCCGCGTCCCAGGGCGGCGCGATGCGCAAGGTGCGCCGCTACTTCGGCGAGGC
CCTCGCCCCGCGGTCTTCCGCTTCCGCCCGCAGCCGGACAGCTCCCTCCTCGAC
GCCGCCTTCGCCGACCTCCTCCACGCGCACTTCTACGAGTCCTGCCCTACCTCAA
GTTTCGCGCACTTCACCGCCAACAGGCCATCCTGGAGGCGTTCGCCGGCTGCCGC
CGCGTGCACGTGTCGACTTCGGCATCAAGCAGGGGATGCAGTGGCCCCGCACTTC
TCCAGGCCCTCGCCCTCCGTCCCGGGCGGCCCTCCCTCGTTCGCGCTACCGGCGTC
GGCCCCCGCAGCCGGACGAGACCGACGCCCTGCAGCAGGTGGGCTGGAAGCTC
GCCAGTTCGCGCACACCATCCGCGTCGACTTCCAGTACCGCGGCCTCGTCGCCG
CCACGCTCGCGGACCTGGAGCCGTTTCATGCTGCAGCCGGAGGGCGAGGAAGACC
CGAACGAGGAGCCCGAGGTAATCGCCGTCAACTCAGTCTTCGAGATGCACCGGC
TGCTCGCGCAGCCCGGGCGCCCTGGAGAAGGTCTGGGCACCGTGCGCGCCGTGC
GGCCCAGGATCGTCACCGTGGTGGAGCAGGAGGCGAATCACAACCTCCGGCACAT
TCCTGGACCGCTTCACCGAGTCTCTGCACTACTACTCCACCATGTTTCGATTCCCTC
GAGGGCGGCAGCTCCGGCGGGCGGCCCATCCGAAGTCTCATCGGGGGCTGCTGCT
GCTCCTGCCCGCCGGCACGGACCAAGTTCATGTCCGAGGTGTACCTCGGCCGGC
AGATCTGCAACGTGGTGGCCTGCGAGGGGGCGGAGCGCACAGAGCGCCACGAGA
CGCTGGGCGCAGTGGCGGAACCGGCTGGGCAACGCCGGGTTTCGAGACCGTCCACC
TGGGCTCCAATGCCTACAAGCAGGCGAGCACGCTGCTGGCGCTCTTCGCCGGCGG
CGACGGCTACAAGGTGGAGGAGAAGGAAGGCTGCCTGACGCTGGGGTGGCACAC
GCGCCCGCTGATCGCCACCTCGGCATGGCGCCTGGCCGGGCGGTGATCTCGCGAG
TTTTGAACGCTGTAAGTACACATCGTGAGCATGGAGGACAACACAGCCCCGGCG
GCCGCCCGGCTCTCCGGCGAACGCACGCACGCACGCACTTGAAGAAGAAGAAG
CTAAATGTCATGTCAGTGAGCGCTGAATTGCAGCGACCGGCTACGATCGATCGGG
CTACGGGTGGTTCCGTCCGTCTGGCGTGAAGAGGTGGATGGACGACGAACCTCCG

Figure 8b

MKREYQDAGSGGGGGGGMGSSSEDKMMVSAAGEGEEVDELLAALGYKVRASDM
ADVAQKLEQLEMAMGMGGVGAGAAPDDSFATHLATDTVHYNPTDLSSWVESMLS
ELNAPPPPLPPAPQLNASTSSTVTGSGGYFDLPPSVDSSSSIYALRPIPSAGATAPADL
SADSVRDPKRMRTGGSSSTSSSSSSSSSLGGGARSSVVEAAPPVAAAANATPALPVVV
VDTQEAGIRLVHALLACAEAVQQENLSAAEALVKQIPLLAASQGGAMRKVAAYFGE
ALARRVFRFRPQPDSSLLDAAFADLLHAHFYESCPYLKFAHFTANQAILEAFAGCRR
VHVVDVFGIKQGMQWPALLQALALRPGPPSFRLTGVPQPQDETDLQQVGWKL
QFAHTIRVDFQYRGLVAATLADLEPFMLQPEGEEDPNEEPEVIAVNSVFEMHRLLAQ
PGALEKVLGTVRAVRPRIVTVVEQEANHNSGTFDRFTESLHYYSTMFDSLEGGSSG
GGPSEVSSGAAAAPAAAGTDQVMSEVYLGRQICNVVACEGAERTERHETLGQWRN
RLGNAGFETVHLGSNAYKQASTLLALFAGGDGYKVEEKEGCLTLGWHTRPLIATSA
WRLAGP

Figure 9a

TTTCGCCTGCCGCTGCTATTAATAATTGCCTTCTTGGTTTCCCCGTTTTTCGCCCCAG
CCGCTTCCCCCTCCCCTACCCTTTTCTTCCCCACTCGCACTTCCCAACCCTGGAT
CCAAATCCCAAGCTATCCCAGAACCAGAAACCGAGGCGCGCAAGCCATTATTAGC
TGGCTAGCTAGGCCTGTAGCTCCGAAATCATGAAGCGCGAGTACCAAGACGCCG
GCGGGAGTGGCGGCGACATGGGCTCCTCCAAGGACAAGATGATGGCGGCGGCGG
CGGGAGCAGGGGAACAGGAGGAGGAGGACGTGGATGAGCTGCTGGCCGCGCTC
GGGTACAAGGTGCGTTCGTTCGGATATGGCGGACGTTCGCGCAGAAGCTGGAGCAG
CTCGAGATGGCCATGGGGATGGGCGGCGTGGGCGGCGCCGGCGCTACCGCTGAT
GACGGGTTCGTGTTCGCACCTCGCCACGGACACCGTGCCTACAATCCCTCCGACC
TGTCGTCTTGGGTCGAGAGCATGCTGTCCGAGCTCAACGCGCCCCCAGCGCCGCT
CCCGCCCCGCGACGCCGGCCCCCAAGGCTCGCGTCCACATCGTCCACCGTCAACAAGT
GGCGCCGCGCGCGGTGCTGGCTACTTCGATCTCCCGCCCCGCGTGGACTCGTCCA
GCAGTACCTACGCTCTGAAGCCGATCCCCTCGCCGGTGGCGGCGCCGTTCGGCCGA
CCCGTCCACGGACTCGGCGCGGGAGCCCAAGCGGATGAGGACTGGCGGCGGCGAG
CACGTCTCTCTCTCTCTCTCGTTCGTCATCCATGGATGGCGGTTCGCACTAGGAGCT
CCGTGGTTCGAAGCTGCGCCGCGCGGCGACGCAAGCATCCGCGGCGGCGCAACGGGC
CCGCGGTGCCGGTGGTGGTGGTGGACACGCAGGAGGCCGGGATCCGGCTCGTGC
ACGCGCTGCTGGCGTTCGCGGAGGCCGTGCAGCAGGAGAACTTCTTGCGGCGG
AGGCGCTGGTCAAGCAGATCCCCATGCTGGCCTCGTTCGAGGGCGGTGCCATGC
GCAAGGTTCGCCGCCTACTTCGGCGAGGCGCTTGCCCCGCGCGTGTATCGCTTCCG
CCCGCCACCGGACAGCTCCCTCCTCGACGCCGCTTCGCCGACCTCTTGACGCG
CACTTCTACGAGTCTTGGCCCTACCTGAAGTTCGCCCACTTCACCGCGAACCAGG
CCATCCTCGAGGCCTTCGCCGGCTGCCGCGCGTCCACGTTCGTCGACTTCGGCAT
CAAGCAGGGGATGCAGTGGCCGGCTCTTCTCCAGGCCCTCGCCCTCCGCCCTGGC
GGCCCCCGTTCGTTCCGGCTCACCGGCGTTCGGGCGCGCGCAGCCCGACGAGACC
GACGCCTTGACAGCAGGTGGGCTGGAACTTGCCAGTTTCGCGCACACCATCCGCG
TGGACTTCCAGTACCGTGGCCTCGTTCGCGGCCACGCTCGCCGACCTGGAGCCGTT
CATGCTGCAACCGGAGGGCGATGACACGGATGACGAGCCCGAGGTGATCGCCGT
GAACTCCGTGTTTCGAGCTGCACCGGCTTCTTGCGCAGCCCGGTGCCCTCGAGAAG
GTCCTGGGCACGGTTCGCGCGCGGTGCGGCCGAGGATCGTGACCGTGGTTCGAGCAG
GAGGCCAACCACAACCTCCGGCACGTTCTTCGACCGCTTCACCGAGTTCGCTGCACT
ACTACTCCACCATGTTTCGATTCTCTCGAGGGCGCCGGCGCCGGCTCCGGCCAGTC
CACCGACGCCTCCCCGGCCGCGGCGCGGCGGCACGGACCGGTTCATGTTCGGAGGT
GTACCTCGGCCGGCAGATCTGCAACGTGGTGGCGTTCGAGGGCGCGGAGCGCAC
GGAGCGCCACGAGACGCTGGGCCAGTGGCGCAGCCGCCTCGGCGGCTCCGGGTT
CGCGCCCGTGCACCTGGGCTCCAATGCCTACAAGCAGGCGAGCACGCTGCTGGC
GCTCTTCGCCGGCGGCGACGGGTACAGGGTGGAGGAGAAGGACGGGTGCCTGAC
CCTGGGGTGGCATAACGCGCCCGCTCATCGCCACCTCGGCGTGGCGCGTTCGCCGCC
GCCGCCGCTCCGTGATCAGGGAGGGGTGGTGGGGCTTCTGGACGCCGATCAAG
GCACACGTACGTCCCTGGCATGGCGCACCCCTCCCTCGAGCTCGCCGGCACGGGT
GAAGCTACCCGGGGGATCCACTAATTCTAAAACGGCCCCACCGCGGTGGAATC
CACCTTTTGTTCCTTTA

Figure 9b

MKREYQDAGGSGGDMGSSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDM
ADVAQKLEQLEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESML
SELNAPPAPLPPATPAPRLASTSSTVTSGAAAGAGYFDLPPAVDSSSSTYALKPIPSV
AAPSADPSTDSAREPKRMRTGGGSTSSSSSSSSSSMDGGRTRSSVVEAAPPATQASAAA
NGPAVPVVVVDTEAGIRLVHALLACAEAVQQENFSAAEALVKQIPMLASSQGGAM
RKVAAYFGEALARRVYRFRPPDSSLLDAAFADLLHAHFYESCPYLKFAHFTANQAI
LEAFAGCRRVHVVDGFIKQGMQWPALLQALALRPGGPPSFRLTGVGPPQPDETDAL
QQVGWKLAFQAHTRVDFQYRGLVAATLADLEPFMLQPEGDDTDDEPEVIAVNSVF
ELHRLLAQPGALEKVLGTVRAVRPRIVTVVEQEANHNSGTFLDRFTESLHYYSTMFD
SLEGAGAGSGQSTDASPAAGGTQVMSEVYLGRQICNVVACEGAERTERHETLGQ
WRSRLGGSGFAPVHLGSNAYKQASTLLALFAGGDGYRVEEKDGCLTLGWHTRPLIA
TSAWRVAAAAAP

Figure 10

maiz-fin	MKREYQDAGG	S...G...GDM	GSSKDKMMAA	AAGAGEQEE	DVDELLAALG	YKVRSSDMAD	55
rht-fina	MKREYQDAGG	SGGG...GGM	GSSKDKMMVS	AAAG...EGE	DVDELLAALG	YKVRASDMAD	55
rice-fin	MKREYQDAGG	SSGGSSADM	GSSKDKMMAG	AAAG...EEE	DVDELLAALG	YKVRSSDMAD	55
gai	MKREYQDAGG	D...HHHQ	...KKTMMH	EED...DGN	GNDDELLAALG	YKVRSSDMAD	44
maiz-fin	VAQKLEQLEM	AMGMGGVGG	GATADDQFV8	HLATDTVHYN	PSDLSSWVES	MLSELNAPPA	115
rht-fina	VAQKLEQLEM	AMGMGGVGG	GATADDQFV8	HLATDTVHYN	PSDLSSWVES	MLSELNAPPA	114
rice-fin	VAQKLEQLEM	AMGMGGVGG	GATADDQFV8	HLATDTVHYN	PSDLSSWVES	MLSELNAPPA	114
gai	VAQKLEQLEM	AMGMGGVGG	GATADDQFV8	HLATDTVHYN	PSDLSSWVES	MLSELNAPPA	93
maiz-fin	PLPPATPAPR	LABTSSTVTS	GAAAGAGYFD	LPPAVD8888	TYALKPIPSB	VAA...PSADPS	174
rht-fina	PLPPATPAPR	LABTSSTVTS	GAAAGAGYFD	LPPAVD8888	TYALKPIPSB	VAA...PSADPS	168
rice-fin	PLPPATPAPR	LABTSSTVTS	GAAAGAGYFD	LPPAVD8888	TYALKPIPSB	VAA...PSADPS	171
gai	PLPPATPAPR	LABTSSTVTS	GAAAGAGYFD	LPPAVD8888	TYALKPIPSB	VAA...PSADPS	114
maiz-fin	TDSARMPKRM	RTGGGSTS88	SSSSSSMDGG	RTR888VBEA	PPATQASAAA	NGPAVPVVVV	234
rht-fina	TDSARMPKRM	RTGGGSTS88	SSSSSSMDGG	RTR888VBEA	PPATQASAAA	NGPAVPVVVV	225
rice-fin	TDSARMPKRM	RTGGGSTS88	SSSSSSMDGG	RTR888VBEA	PPATQASAAA	NGPAVPVVVV	231
gai	TDSARMPKRM	RTGGGSTS88	SSSSSSMDGG	RTR888VBEA	PPATQASAAA	NGPAVPVVVV	159
maiz-fin	DTQEAQIRLV	HALLACAEAV	QENF8AAEA	LVKQIPMLAS	BQGGAMRKKVA	AYFGEALARR	294
rht-fina	DTQEAQIRLV	HALLACAEAV	QENF8AAEA	LVKQIPMLAS	BQGGAMRKKVA	AYFGEALARR	285
rice-fin	DTQEAQIRLV	HALLACAEAV	QENF8AAEA	LVKQIPMLAS	BQGGAMRKKVA	AYFGEALARR	256
gai	DTQEAQIRLV	HALLACAEAV	QENF8AAEA	LVKQIPMLAS	BQGGAMRKKVA	AYFGEALARR	219
maiz-fin	VYRFRPPDPS	SLLDAAFPADL	LHAHFEYECF	YLLKFAHPTAN	QAILLEAFAGC	RRVHVVDGFI	354
rht-fina	VYRFRPPDPS	SLLDAAFPADL	LHAHFEYECF	YLLKFAHPTAN	QAILLEAFAGC	RRVHVVDGFI	345
rice-fin	VYRFRPPDPS	SLLDAAFPADL	LHAHFEYECF	YLLKFAHPTAN	QAILLEAFAGC	RRVHVVDGFI	256
gai	VYRFRPPDPS	SLLDAAFPADL	LHAHFEYECF	YLLKFAHPTAN	QAILLEAFAGC	RRVHVVDGFI	277
maiz-fin	KQGMQWPALL	QALALRPGGP	PSFRLTGVP	POPDETALQ	QVGWKLAAQFA	HTIRVDFQYR	414
rht-fina	KQGMQWPALL	QALALRPGGP	PSFRLTGVP	POPDETALQ	QVGWKLAAQFA	HTIRVDFQYR	405
rice-fin	KQGMQWPALL	QALALRPGGP	PSFRLTGVP	POPDETALQ	QVGWKLAAQFA	HTIRVDFQYR	256
gai	KQGMQWPALL	QALALRPGGP	PSFRLTGVP	POPDETALQ	QVGWKLAAQFA	HTIRVDFQYR	337
maiz-fin	GLVAATLADL	EPFMLQPEG	EDTDDPEPEVI	AVNSVFELHR	LLAQPGALEK	VLGTVRAVRP	473
rht-fina	GLVAATLADL	EPFMLQPEG	EDTDDPEPEVI	AVNSVFELHR	LLAQPGALEK	VLGTVRAVRP	465
rice-fin	GLVAATLADL	EPFMLQPEG	EDTDDPEPEVI	AVNSVFELHR	LLAQPGALEK	VLGTVRAVRP	256
gai	GLVAATLADL	EPFMLQPEG	EDTDDPEPEVI	AVNSVFELHR	LLAQPGALEK	VLGTVRAVRP	392

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Figure 10 (Continued)

maiz-fin	RIVTVVEQEA	NHNSGTFFLDR	FTESLHYYST	MFDSLEGAGA	GSQS	TDAS	P	A	AAAGGT	529
rht-fina	RIVTVVEQEA	NHNSGTFFLDR	FTESLHYYST	MFDSLEGGS	GGP	SEVS	SG	AAAPAAAGT	525	
rice-fin	EIFTVVEQES	NHNSPIFLDR	FTESLHYYST	MFDSLEGVP	GQ				256	
gai									434	
maiz-fin	DQVMSEVYLG	RQICNVVACE	GAERTERHET	LQQWRNRLGG	SGFA	PVHL	QS	NAYKQASTLL	589	
rht-fina	DQVMSEVYLG	RQICNVVACE	GAERTERHET	LQQWRNRLGN	AGFE	TVHL	QS	NAYKQASTLL	585	
rice-fin	DKVMSEVYLG	KQICNVVACD	GPRVERHET	LSQWRNRFGS	AGFA	AAHI	QS	NAYKQASTLL	256	
gai									494	
maiz-fin	ALFAGGDDGYR	VEEKDGCLTL	QWHTRPPLIAT	SAWRVA	AAA	P			630	
rht-fina	ALFAGGDDGYR	VEEKDGCLTL	QWHTRPPLIAT	SAWRVA	ACP				623	
rice-fin	ALFAGGDDGYR	VEEKDGCLTL	QWHTRPPLIAT	SAWRVA	ACP				256	
gai	ALFAGGDDGYR	VEEKDGCLTL	QWHTRPPLIAT	SAWRVA	ACP				532	

Figure 11a

TACCAAGACGCCGGCGGGAGTGGCGGCGACATGGGCTCCTCCAAGGACAAGATG
ATGGCGGCGGCGGCGGGAGCAGGGGAACAGGAGGAGGAGGACGTGGATGAGCT
GCTGGCCGCGCTCGGGTACAAGGTGCGTTCGTTCGGATATGGCGGGGCTGGAGCA
GCTCGAGATGGCCATGGGGATGGGCGGCGTGGGCGGCGCCGGCGCTACCGCTGA
TGACGGGTTCGTGTCGCACCTCGCCACGGACACCGTGCACTACAATCCCTCCGAC
CTGTCGTCCTGGGTCGAGAGCATGCTGTCCGA

Figure 11b

YQDAGSGGDMGSSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMAGLEQ
LEMAMGMGGVGGAGATADDGFVSHLATDTVHYNPSDLSSWVESMLS

Figure 11c

TCCTCCAAGGACAAGATGATGGCGGCGGCGGCGGGAGCAGGGGAACAGGAGGA
GGAGGACGTGGATGAGCTGCTGGCCGCGCTCGGGTACAAGGTGCGTTCGTTCGA
TATGGCGGACGTCGCGCAGAAGCTGGAGCAGCTCGAGATGGCCATGGGGATGGG
CGGCGTGGGCGGCGCCGGCGCTACCGCTGATGACGGGTTCGTGTCGCACCTGTCG
TCCTGGGTTCGAGAGCATGCTGTCCGAGCTCAACGCGCCCCCAGCGCCGCTCCCGC
CCGCGACGCCGGCCCCAAGGCTCGCGTCCACATCGTCCACCGTCACAAGTGGCGC
CGCCGCCGGTGCTGGCTACTTCGATCTCCCGCCCCGCCGTGGACTC

Figure 11d

SSKDKMMAAAAGAGEQEEEDVDELLAALGYKVRSSDMADVAQKLEQLEMAMGM
GGVGGAGATADDGFVSHLSSWVESMLSELNAPPAPLPPATPAPRLASTSSTVTSGAA
AGAGYFDLPPAVD

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Figure 12a

GCGGCGCTCGGGTACAAGGTGCGCGCCTCCGACATGGCGGACGTGGCGCAGAAG
CTGGAGCAGCTCGAGATGGCCATGGGGATGGGCGGCGTGGGCGCCGGCGCCGCC
CCCGACGACAGCTTCGCCACCCACCTCGCCACGGACACCGTGCACTACAACCCCA
CCGACCTGTCGTCTTGGGTCGAGAGCATGCTGTCGGAGCTCAACGCCTCCACCTC
CTCCACCGTCACGGGCAGCGGCGGCTACTTCGATCTCCCGCCCTCCGTCGACTCC
TCCAGCAGCATCTACGCGCTGCGGCCGATCCCCTCCCGGCCGGCGCGACGGCGC
CGGCCGACCTGTCCGCCGACTCCGTGCGGGATCCCAAGCGGATGCGCACTGGCG
GGAGCAGCACCTCGTCGTCATCCTCCTCCTCGTC

Figure 12b

AALGYKVRASDMADVAQKLEQLEMAMGMGGVGAGAAPDDSFATHLATDTVHYN
PTDLSSWVESMLSELNASTSSTVTGSGGYFDLPPSVDSSSSSYALRPIPSGATAPAD
LSADSVRDPKRMRTGGSSTSSSSSSS